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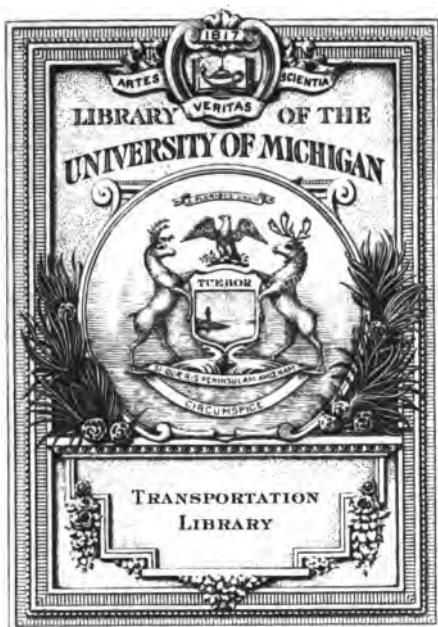
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**MR. PRESIDENT AND GENTLEMEN :**

Macaulay says that of all inventions, the alphabet and printing press alone excepted, those inventions which abridge distance have done most for the civilization of our species.

A nation, or an age of civilization, is perhaps more easily judged and understood by the character and extensiveness of its roads, than by any other symbol of progress.

Intercourse between communities, and the development of commercial life, have afforded the necessity for regularly adopted routes of travel, and more or less systematically prepared roadways from the time before the building of those famous highways between ancient Memphis and Babylon, over which the untold wealth of the valleys of the Euphrates and the Nile found means of exchange, where the magnificent cities of Nineveh, Damascus and Tyre,

K.M.

the earliest great commercial centres, sprang up, and over which the splendid armies of Xerxes and Alexander the Great passed in all the pride and glory of those early days.

The roadways of which the earliest traces appear, were well constructed, as is evident from the remains found, but they were limited in number, laid out generally in direct lines, and had the advantage in their construction of all the resources of the rich and powerful nations which built them.

As the world has grown older, and civilization has spread and ripened, intercourse has increased, commerce has pressed out its foot in every direction, from every centre, multiplying and ramifying its paths in as bewildering an extent as the threads of the spider's web.

Various necessities and circumstances have governed the building and maintenance of roads, of different times and people.

The old countries where war has been a constant factor, have looked after them as a matter of national policy and military necessity, and have the result in the finest and most durable ways in the world.

The old military roads of the Roman Empire constituted a system the superior of which the world has never seen, in its scope, and the thoroughness with which it was perfected in all directions. The old "world-conquerors" were good road builders for their day, though Blake crushers and the respective merits of Trinidad, and rock asphalts, and Wheeling fire brick, were matters of which they never dreamed ; and those of us who have had occasion to form intimate acquaintance with American country roads in spring, have more than once found ourselves in positions to heartily wish that some of the rural road makers, who worked out their taxes by plowing up the mud from the ditches, and plastering it over the middle of the highways, had had some good experience in the road gangs under the centurions of Julius Cæsar's army.

An eminent writer says : "The road is that physical sign or symbol by which you will best understand any age or people. If they have no roads, they are savages, for the road is the creation of man, and the type of civilized society."

The Romans were, without doubt, the best road

builders in the ancient world. Their good highways was one of the causes of their superiority in progress and civilization. When they conquered a province, they annexed it by good roads, which brought them in easy communication with the great cities of the Roman world. When their territory was so large that a hundred millions of people acknowledged their military and political power, their capital city was the centre of such a net-work of highways, that it was then a common saying, "All roads lead to Rome."

The best roads in the world to-day are those of England, France, and Germany, the excellence of which is due to the fact, that those countries were the first to awaken from the long sleep of the dark ages, and the growing rivalry between them necessitated attention to their roads, for the proper prosecution of both their military and their mercantile interests. In each country they early came under the national supervision, the results of which are seen in the most splendid highways in existence, costing the least to maintain, and in every way the most satisfactory and economical for those who use them.

Up to the advent of railroads, most of the settlements in this country were along our water fronts, and on our sea coasts, lakes, and rivers. The invention of steam, and the development of the railroad, seem to have taken all our energies and resources, to the neglect of our roads and highways, and now that we have more miles of railway than the whole of the Eastern Hemisphere, and about all that we can make to pay, at present, we can well afford to turn our attention to the matter of highways, in which everybody should be interested, for all have to use them, rich and poor alike, those that ride and those that walk. .

No country has a greater road mileage, in proportion to the population, than the United States, but while with characteristic American push and hurry, the most extensive means of communication and intercourse have been provided, we have suffered the consequence of a lack of any general system of public policy, covering the location, construction, and maintenance of ways.

In many a case, where one's way leads him through the old farming regions of New England

and the Middle States, he may take occasion to do anything but bless the memory of the frugal early settlers who, when the necessities of the case seemed to demand that a road be established for the convenience of public travel, each contributed a way across his farm, laying perhaps over the worst hill, and through the sandiest, or the rockiest, or the wettest land, with a view rather to the economy of his best pastures, than the saving, in the years to come, of the time and strength of the traveller obliged to use it.

American roads are far below the average; they certainly are among the worst in the civilized world, and always have been,—largely as a result of permitting local circumstances to determine the location, with little or no regard for any general system, and haste, and waste, and ignorance in building.

Old post-roads and turnpikes, in times no further back than the war, afforded the only comfortable travel to be had in many parts of the country; nor could the general badness of the roads, by any means, be attributed to a lack of the proper materials for their construction. Indeed, it often happens that

we find them the worst, where natural resources are the most abundant, and the better roads are frequently found where the natural conditions were so bad that the ordinary crude and wasteful expenditures were out of the question.

Fifty years ago, there was some excuse for bad roads, for our country was poor. Now it is rich, there is no excuse.

A good road is always to be desired, and is a source of comfort and convenience to every traveler.

Good roads attract population, as well as good schools and churches. Good roads improve the value of property, so that it is said a farm lying five miles from market connected by a bad road, is of less value than an equally good farm lying ten miles away from market, connected by a good road.

A larger load can be drawn by one horse over a good road, than by two over a bad one.

, Good roads encourage the greater exchange of products and commodities between one section and another.

Good roads are of great value to railroads as feeders.



Various movements, already under way, in the direction of road improvements, must have and already are having their effect, in bringing about a material raising of the average quality. The governors of several States have made special and important references to it in their annual messages, and in several States, bills have been presented having in view the betterment of State highways, by regularly organized systems of work, to be carried out under the supervision of departments provided by the State.

In Pennsylvania a general tax levy of seven and one-half mills has been ordered by legislature, for road improvements. The forces working to bring about such results as this are powerful, and increasing every day.

The high point to be aimed at, is the recognition of the importance of the whole situation by the national government, and the establishment by Congress of a national system.

The following outline may suggest some idea of a scheme in the right direction, which might be elaborated by some one better qualified and having more time than I have at my command.

A commissioner of highways might be provided for, in the Agricultural Department, with a corps of consulting engineers, and suitable appropriations made, for the prosecution of a general supervising work.

Under the charge of this commission, full systems of maps should be prepared, based largely perhaps upon the working of the state and county boards, showing more or less completely, as circumstances would permit, the highways of the country.

For co-operation with this central bureau and the prosecution of the work in the most thorough and practical way, each State should have its highway commissioner, charged with the highest interests of the State in the way of maintaining its system of roads under the most approved methods and for the general public welfare. Then the best practical results could probably be attained, by the division of the State into highway districts, consisting of counties, or perhaps townships, each of which should have its overseer in full charge of the opening and construction of new roads in his district and the proper maintenance of all, responsible for the expenditure

of the regular appropriations for these purposes. These districts could then be divided into smaller ones under sub-overseers.

The importance and the value to any country, any section, and every citizen from the highest to the lowest, whether tax-payers or tramps, of well constructed and properly maintained roads, is not easily estimated, but clearly it is greater than that of many affairs which are continually receiving the time and attention of the people in their homes, counting-rooms, public meetings and legislative halls.

It is a matter to be considered side by side with our splendid and always improving system of public education, the assessment of our tariff duties, or the appropriations regularly made for river and harbor improvements.

But the question of the most particular interest, to-day, to you and to me, as manufacturers and merchants, in this whole question of good and bad roads is, *what is the effect on our business?* Now it may be possible that there are those who will think they see an advantage for the carriage builder in poor roads, where in traveling over hills that might easily be

avoided, going ten miles to make five as the crow flies, pulling through mud and sand that should be gravel and jolting over rocks that might be macadam, the vehicles of the unfortunate owners would go to pieces in one half the time they ought to stand under favorable circumstances, and necessitate the purchase of new ones, to the advantage and profit of the manufacturer.

But a man who entertains such an idea would waste no time in killing his goose to secure the last golden egg.

It must be clear to any man with the most ordinary business instincts that good roads mean thrift, liberality, and wealth. They mean good farms and good value to real estate. They mean that the farmer enjoying their use will save time going over them, will save wear and tear, not only on his wagons, but on his teams, will be a richer man on account of them, and have the more money to buy your carriages, running into higher value, (while his sons and daughters can have their bicycles and tricycles at less expense,) and his example must be followed by his neighbors.

Now you are honest manufacturers, and have no desire to have your vehicles wear out quickly, that they may be sooner replaced, but you believe, I doubt not, that the better the vehicle and the longer it lasts, the better business and profit will come to you.

Good roads mean for you and for me better business. Good roads encourage riding and driving, and the sale of our vehicles, while bad roads mean less business for you and for me, for where the roads are bad the traffic must of necessity be much less.

As a nation we are a remarkably patient and an easy-going people, considering the enterprise and business activity for which we are noted the world over, and rather too apt to fall into the way of doing things as a matter of course. As a result of this, very strenuous and continuous efforts are frequently necessary, to bring about the farthest reaching and most desirable reforms. From a business point of view, we cannot afford to neglect any opportunity to help along the present movement.

As an instance of what is being done, see the work of the League of American Wheelmen, in the ap-

pointment of its highway committees, the issuing of road books and maps, the pressing forward of legislative bills, and lately in the publication of a comprehensive little manual on the making and care of good roads, a copy of which I shall be glad to have forwarded to any one who may care to send me his address.

Work of this sort can well and profitably be undertaken by the Carriage Builders' National Association. With all the great resources at your command you cannot afford not to divert a small percentage each year, beginning right now, toward helping along in the good work, and it impresses itself upon me most strongly as a part of your most urgent duty toward yourselves, to appoint at once, if you have not already done so, your committee on highways, clothing them with power to do some practical work, and giving them under reasonable limitations, at least, the approach to your treasury. A moderate amount of money judiciously expended in educating the people up to their needs and best interests, in showing them how their roads are, and how they ought to be, and how to go to work to make them so,

could not be put out at better interest. I am credibly informed that within one hundred miles of this building the capital invested in the carriage industry amounts to seven million dollars; and the interest which I informally represent to you is a true branch of this vast industry. The manufacture and sale of carriages to be drawn by horses and the manufacture of carriages to be impelled by the rider is essentially one and the same. The character of the motive power cannot of course change the character of the vehicle. We, who manufacture bicycles, feel that we have a right to fraternization with you. We seek fellowship with you in your efforts to improve the travelling vehicles of the country and the roadways by the improvement in which our interests as manufacturers and the people's prosperity and happiness are to be enlarged.

The bicycle interest is young in years, but it has already become a large one. As an industry it ranks among the fine arts, while the magnitude of the business and the number of the vehicles made and sold yearly would, we fancy, be a matter of surprise to some of you and of amazement to the public at large.

